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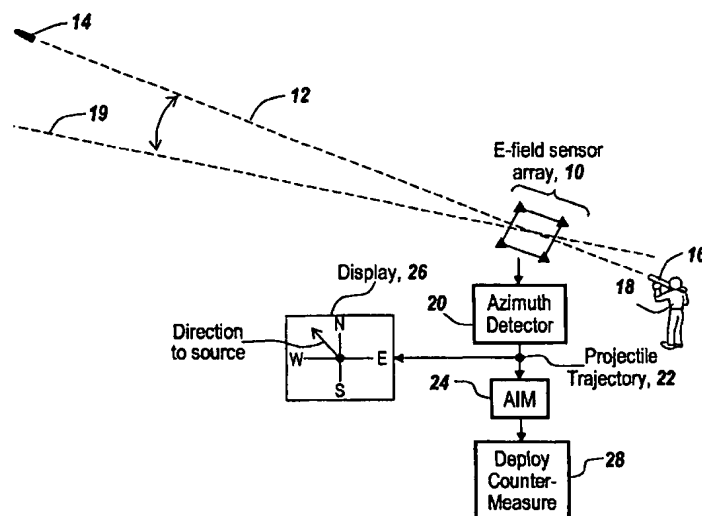
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(54) Title: METHOD AND APPARATUS FOR DETECTING SOURCES OF PROJECTILES



(57) Abstract: What is provided is the use of an array of E-field sensors (10) to detect the closest approach of incoming projectiles (14) and to determine through time difference of arrival the bearing (22) of the incoming projectile (14), thus to identify the bearing of the source of the projectile. dE/dT (96) processing of the individual outputs of the E-field sensors (10) indicates by the zero crossing (98) the peak of the E-field disturbance and thus the instance of time of the closest approach of the projectile (14) to a sensor.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/20205

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G01R 29/12(2006.01);G01S 1/24(2006.01)

USPC: 324/457;340/561;342/387

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 324/457; 340/561; 342/387

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,931,740 A (HASSANZADEH et al.) 5 June 1990 (05.06.1990) the entire document	1-20
Y	US 3,564,529 A (KAUFMAN et al.) 16 February 1971 (16.02.1971) the entire document	1-20
Y	US 4,638,321 A (DROGIN) 20 January 1987 (20.01.1987) the entire document	2,3
E	US 20040239562 A1 (SCHANTZ) 02 December 2004 (2.12.2004) paragraph [0040]	6
A	US 6,031,378 A (ROSIN) 29 February 2000 (29.02.2000) the entire document	1-20
Y	US 3,956,743 A (GEISZLER et al) 11 May 1976 (5.11.1976) column 3, lines 8-31.	7

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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